

CLAIMS

WHAT IS CLAIMED IS:

1. A data processing system, comprising:

data acquisition means for acquiring data;

determination means for determining whether user requests saving of the acquired data;

indexing means for assigning a predetermined index to the data requested for saving, said index dynamically assigned to the data; and

saving means for saving the requested data and the assigned index in a predetermined storage unit.

2. The system according to Claim 1, wherein said data acquisition means acquires data from a browser client, said browser client allowing browsing of data in an internet.

3. The system according to Claim 1, wherein the predetermined storage is a database, and said system further comprising data retrieving means for retrieving data from the database based on a user-supplied index, said user-supplied index specified by a user.

4. The system according to Claim 1, further comprising:

sorting means for sorting indices of the data in the storage unit; and

display means for displaying a result of the sorting by said sorting means.

5. The system according to Claim 4, wherein said sorting means performs the sorting based on a plurality of types of indices.

6. The system according to Claim 4, further comprising:

5 selecting means for selecting an index from the indices displayed on said display means; and

retrieval means for retrieving data corresponding to the index selected by said selecting means from the database.

7. The system according to Claim 4, further comprising:

10 deleting means for deleting at least one index from the indices displayed on said display means; and

removal means for removing data corresponding to the index deleted by said deleting means from the database.

8. The system according to Claim 4, wherein at least one of the data has a plurality of values for an index, and

said sorting means places the plurality of values at positions corresponding to respective values.

9. The system according to Claim 2, said saving means comprising:

folder creation means for creating a new folder for newly browsed data;

file name assigning means for assigning a predetermined name to the newly browsed data without intervention by a user; and

file saving means for saving the newly browsed data in the new folder with the assigned file name.

5

10. The system according to Claim 9, wherein said folder creation means creates the new folder with a folder name created based on a predetermined rule.

11. The system according to Claim 10, wherein the folder name is a fixed name.

12. The system according to Claim 2, said saving means comprising:
file name generation means for generating a unique file name for the newly browsed data without intervention by a user; and
file saving means for saving the newly browsed data with adding the generated file name.

13. The system according to Claim 2, wherein said indexing means acquires a URL of the data from the browser as the index.

20

14. The system according to Claim 2, wherein said indexing means acquires at least one of a keyword or a title embedded in the data from the browser as the index.

15. The system according to Claim 14, wherein said indexing means displays the keyword or the title acquired from the browser.

14. The system according to Claim 1, wherein the index includes a time when the data is saved, said system further comprising:

node creation means for creating nodes corresponding to groups classified on the basis of the timing of saving, said node creation means creates a hierarchical nodes by dividing a group corresponding to a period into a plurality of sub group each corresponding to a shorter period and creating a node corresponding to each of sub group; and

node displaying means for displaying a plurality of nodes created by said node creation means in an order of saving.

15. The system according to Claim 14, wherein the data is on the network and each of the group corresponds to a session for the network.

16. The system according to Claim 14, wherein the data is file data and each of the group corresponds to a period from a start to an end of a file system.

17. The system according to Claim 14, wherein the data is file data and each of the group corresponds to an operation in a period for a file system.

18. The system according to Claim 13, further comprising word assigning means for assigning a word specified by a user as a further index to the data to be saved by said saving means.

5 19. The system according to Claim 1, wherein if an index assigned to the data to be saved has been assigned to other data, said saving means saves the data as a new data or updates the other data according to a setting by the user.

10 20. The system according to Claim 1, wherein if an index assigned to the data to be saved has been assigned to other data, said saving means inquires to the user whether the data is to be saved as a new data or an updated data.

15 21. The system according to Claim 1, wherein said saving means saves the data in correspondence with an effective period, and said system further comprising:
comparing means for comparing the effective period with a current time at
a predetermined timing; and
removal means for removing data in correspondence with the effective
period before the current time based upon the result of a comparison by said comparing means.

20 22. The system according to Claim 21, wherein the predetermined timing is a time when the system accepts no operations by a user.

23. The system according to Claim 21, wherein said removal means requests a user to confirm the removal of the data and removes the confirmed data.

24. The system according to Claim 21, wherein said removal means requests a user to confirm the removal of the data or removes the data without confirmation by the user in accordance with a setting by the user.

25. The system according to Claim 21, wherein if the effective period is not specified by the user, said saving means saves the data in correspondence with a non-limited effective period.

26. The system according to Claim 2, wherein said saving means saves the browsed data in a first save mode and saves the URL in place of the browsed data in a second save mode.

27. The system according to Claim 2, wherein said saving means saves the browsed data with data linked thereto.

28. The system according to Claim 2, wherein said saving means always saves the browsed data without any instruction for each of the browsed data by the user.

29. The system according to Claim 28, wherein said saving means saves the browsed data when the browsing is operated to move to another URL.

30. The system according to Claim 28, wherein said saving means is controlled not to save the browsed data in a URL specified by the user in advance.

5 31. The system according to Claim 2, further comprising index extracting means for extracting as an index a specific data from a data train constituting address of the browsed data in the network on the basis of a predetermined rule.

32. The system according to Claim 31, wherein the specific data is a domain name.

33. The system according to Claim 32, wherein the predetermined rule is a rule for eliminating a parameter, a protocol, an obvious address, and page data from the data train, and extracting a domain name from the rest of the data with referring to a knowledge base of domain names.

34. The system according to Claim 31, wherein the specific data is a name of organization.

20 35. The system according to Claim 34, wherein the predetermined rule is a rule for eliminating a parameter, a protocol, an obvious address, page data, and domain name from the data train, and determining the rest of the data as an organization name.

36. The system according to Claim 35, wherein the predetermined rule includes a rule for dividing the rest of the data into partial data with a predetermined symbol and determining each of the partial data as an organization name.

5 37. The system according to Claim 1, further comprising sending means for sending the acquired data or a specific part thereof to a destination.

38. The system according to Claim 37, wherein the specific part is a URL of the saved data.

39. The system according to Claim 37, wherein the specific part is the saved data except for an embedded image.

40. The system according to Claim 2, further comprising editing means for editing the browsed data.

41. The system according to Claim 40, wherein said editing means includes annotation means for adding an annotation to the browsed data.

20 42. The system according to Claim 41, wherein said annotation means adds an annotation in such a manner that the annotation is distinguishable from the browsed data.

43. The system according to Claim 40, wherein said editing means includes changing means for changing a display form of a designated portion in the browsed data.

44. The system according to Claim 2, further comprising:
5 extraction means for extracting a predetermined type of data from the browsed data; and
extracted data saving means for saving the extracted data in the database.

45. The system according to Claim 44, wherein said extraction means extracts data in a predetermined column in response to a copying operation of data from a specified
10 portion of the browsed data to the predetermined column, and said extracted data saving means saves the extracted data with an attribute corresponding to the predetermined column.

46. The system according to Claim 44, wherein the predetermined type of data
15 includes at least one of an organization name, a person name, an E-mail address, a telephone number, a Fax number, and a keyword appended to the data.

47. The system according to Claim 2, wherein if the data requested to be saved includes data in other URL, said saving means downloads the included data from the other
20 URL.

48. The system according to Claim 47, wherein if the data in the other URL has been downloaded, said saving means dispenses with the downloading of the data.

49. The system according to Claim 2, further comprising mode selection means for selecting an automatic save mode, and in the automatic save mode, said determination means always determines the user requests to save the browsed data without instruction for each
5 of the browsed data.

50. The system according to Claim 3, wherein said data acquisition means, said determination means, said indexing means, said saving means, and said database are equipped in a server apparatus, and

10 said system further comprising at least one client apparatus connected to said server apparatus, each of said client apparatus transmits a user request to said server apparatus and receives a response to the user request from said server apparatus.

15 51. The system according to Claim 50, wherein said data acquisition means in said server apparatus acquires data in an internet.

52. The system according to Claim 50, wherein said server apparatus further comprising:

a local database;

20 a web information storage device for storing web information acquires from an internet: and

administration means for administrating data in either of said database, said local database, and said web information storage device.

53. The system according to Claim 52, wherein at least one of said client apparatus further comprising:

a client local database;

5 a client web information storage device for storing web information acquires from an internet: and

client administration means for administrating data in either of said database, said local database, and said web information storage device.

10 54. The system according to Claim 3, wherein said database is equipped in a server apparatus, and said data acquisition means, said determination means, said indexing means, and said saving means are equipped in at least one client apparatus connected to said server apparatus.

15 55. The system according to Claim 3, wherein said system includes a plurality of client apparatuses, and said data acquisition means, said determination means, said indexing means, said saving means, and said database are equipped in each of said client apparatuses, and each of said client apparatuses can access the database equipped in another client apparatus.

20 56. The system according to Claim 3, wherein said database is equipped in a server apparatus, and index database for storing the indices of said database is equipped in at least one client apparatus connected to said server apparatus.

57. The system according to Claim 3, wherein said data acquisition means, said determination means, said indexing means, said saving means, and said database are equipped in a server apparatus, said data acquisition means acquires data in an internet, and said system further comprising at least one browser connected to said server apparatus, each of said browser browses web page in the internet via said server apparatus and transmits a user action on the browses web page to said server apparatus.

58. A data processing method comprising:
acquiring data;
determining whether a user requests to save the acquired data;
assigning a predetermined index to the data requested to save, without inputting any index; and
saving the requested data with the assigned index in a predetermined storage unit.

59. A computer-executable program for controlling a computer to perform data processing, said program comprising codes for causing the computer to perform:
a data acquisition step of acquiring data;
a determination step of determining whether or not a user requests to save the acquired data;
an indexing step of assigning a predetermined index to the data requested to save, without inputting any index; and

a saving step of saving the requested data with the assigned index in a predetermined storage unit.

60. A data processing method comprising:
- acquiring data;
- receiving a user request to save the acquired data;
- assigning a predetermined index to the data requested for saving; and
- saving the requested data with the assigned index in a predetermined

storage unit.

61. The method of claim 60, wherein said predetermined index is dynamically generated.

62. The method of claim 61, wherein said predetermined storage unit is a database.

63. The method of claim 62, further comprising retrieving data from said database based on a user-supplied index.

64. The method of claim 62, further comprising:
- sorting indices of the data saved in the database; and
- displaying a result of said sorting indices on a display unit.

65. The method of claim 64, wherein said sorting is performed on a plurality
of index types.

66. The method of claim 65, further comprising:
selecting an index from the indices displayed; and
retrieving data corresponding to the index selected from the database.

67. The method of claim 66, further comprising:
deleting at least one index from the indices displayed on said display unit;
and
removing data corresponding to said deleted index from the database.

68. The method of claim 67, further comprising assigning a user-specified
word as a second index for the data to be saved.

69. The method of claim 68, further comprising sending the acquired data to a
predetermined destination.

70. The method of claim 68, further comprising sending a specific part of the
acquired data to a predetermined destination.

71. The method of claim 60, wherein said data is acquired from a browser
client, said browser client allowing browsing of data in an internet.

72. The method of claim 71, further comprising creating a new folder for newly browsed data in said storage unit.

5 73. The method of claim 72, further comprising assigning a predetermined file name to said newly browsed data.

74. The method of claim 73, further comprising saving said newly browsed data in said new folder with said predetermined file name.

75. The method of claim 74, further comprising editing the browsed data.

76. The method of claim 75, wherein said editing includes adding an annotation to the browsed data, said annotation is distinguishable from the browsed data.

77. The method of claim 71, further comprising:
extracting a predetermined type of data from the browsed data; and
saving the extracted data in the storage unit.